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ASSOCIATION OF

FEDERAL COMMUNICATIONS CONSULTING ENGINEERS

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Transmitted on behalf of the Association of Federal Communications Consulting Engineers ("AFCCE") is an original and 14 copies of Reply Comments to be associated with ET Docket No. 99-34.

If any questions should arise concerning this matter, please communicate with the undersigned.

R. Morgan Burrow
Richard P. Biby
Thomas H. Creighton
Robert A. Surette
Louis A. Williams, Jr.

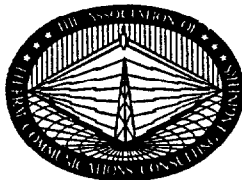
Sincerely,

A handwritten signature in black ink, appearing to read "Cynthia M. Jacobson", written over a horizontal line.

Cynthia M. Jacobson
President

Enclosures

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List A B C D E



ASSOCIATION OF

FEDERAL COMMUNICATIONS CONSULTING ENGINEERS

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Before the
FEDERAL COMMUNICATIONS COMMISSION
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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of
An Industry Coordination Committee
System for Broadcast
Digital Television Service

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ET Docket 99-34
FCC 99-8

Reply Comments

of the

Association of Federal Communications Consulting Engineers

Introduction

The Association of Federal Communications Consulting Engineers (AFCCE) submits these Reply Comments in response to filings in the above captioned docket. AFCCE is a professional organization whose members are professional consulting engineers serving broadcasters and other segments of the communications industry and whose associate members are primarily the engineering executives of broadcast group owners and equipment manufacturers or members of allied fields including regulatory agencies and the communications bar. AFCCE has been active for over 50 years and has filed comments in virtually all FCC proceedings related to digital television implementation.

In the instant filing, AFCCE takes particular note of the comments submitted by the following organizations and individuals:

- Association for Maximum Service Television and the National Association of Broadcasters (MSTV / NAB) [joint filing]
- Association of America's Public Television Stations and the Public Broadcasting Service (APTS / PBS) [joint filing]
- Association of Local Television Stations (ALTV)
- Association of Public Safety Communications Officials (APCO)
- Community Broadcasters Association (CBA)
- Consumer Electronics Manufacturers Association (CEMA)
- Donald G. Everist (Everist)
- du Treil Lundin & Rackley (DLR)
- Fox Television Stations, Inc. (Fox)
- Lohnes and Culver (L&C)

These reply comments have been prepared under the auspices of the AFCCE Digital Television Committee.

Need for a Coordination System

AFCCE does not believe that a need for a coordination system or process has been demonstrated. In this regard, it agrees with the comments of DLR, L&C, Everist, ALTV, Fox, and CBA which question the need for, and the advisability of, establishing a national program for the coordination of spectrum utilized for DTV broadcasting.

AFCCE is concerned with the Commission's basic approach to this issue which appears to assume that a need exists and that adoption / implementation of a coordination program extra-FCC is a foregone conclusion; the Commission's request for comments in the NPRM sought input from the industry on committee structure, functions, protocols, selection of coordinators, and commission oversight. Noticeably lacking was in emphasis on whether such a process should be implemented including presentation of pro and con considerations. Should not this matter have been introduced in a Notice of Inquiry (NOI) so that the merits of the concept could be thoroughly evaluated prior to focussing on the details of how to implement a "coordination" system? It is clear from most of the comments filed in this docket that the commenters are uneasy with the concept of the proposal, with the exception of the original proponents and land mobile interests. AFCCE believes these concerns are not unfounded.

MSTV / NAB suggest in their comments that the "...allotment / assignment process is more complex and proposed modifications are more difficult to evaluate than anticipated just two years ago." To the contrary, AFCCE in multiple filings in Docket 87-268 repeatedly called the Commission's attention to the complexity and imbedded technical inconsistencies of the then-proposed DTV rules and processes. Assuming, arguendo, that these complexities exist, AFCCE does not believe that the solutions should be sought in the establishment of some quasi-official agency. AFCCE has repeatedly called-for the establishment of a "TASO II" organization to assist the Commission in resolving the technical issues. One has only to look back to the early days of NTSC channel allotment policies, culminating in a need for a "freeze" in 1948 which lasted until 1952, to see why the original TASO organization was established. The similarities are worth contemplating.

Is the Commission's seeming willingness to outsource the technical responsibility for reviewing and evaluating applications based on economic considerations (staff resources, computational tools) or a lack of in-house technical expertise? Or...? AFCCE presumes that it is the perceived lack of internal resources that drive this proposal. AFCCE's response to this is that the Commission's fee-based application process should reflect the cost of properly processing the applications. Simply put, the Commission should raise its fees to cover the cost of doing the job it is charged with doing by the Communications Act, if necessary.

Has any economic analysis been performed to demonstrate that the cost to the consumers (the broadcasters) will be lower if the external coordination agency charges a fee (on-top of the FCC's filing fee) than if the Commission adjusted its fees so that it would be able to keep the processing in-house? Will the Commission lower its filing fees because its processing duties would be (theoretically) minimized? AFCCE believes that an adequate cost justification has not been presented to the industry by the Commission or others. Before adopting any plan which relies on external "coordinators", the Commission should present for public comment a thorough economic evaluation and impact analysis as required by the Regulatory Flexibility Act.

The Land Mobile Model

The proposition set-forth by the Commission ^{1/} (and echoed by some proponents of establishing a "coordination" system) that the coordination processes used in other services are good models for DTV broadcasting is flawed. AFCCE agrees with the comments of DLR and others that the use of a land mobile model as being parallel to the requirements for broadcast spectrum utilization is an "apples and oranges" comparison. In the land mobile services, the licensees employment of radio systems is incidental to their business or public service activities. Typically, these licensees are vying for essentially equal facilities and their right to use particular radio frequencies derives from the nature of their activities (e.g., public safety, transportation, local government, etc.) For broadcasters, however, use of the spectrum is their business (for without it they have no business) and the parameters of their licenses or authorizations have a significant impact on their ability to conduct business in a competitive marketplace; the ability to optimize / maximize coverage and signal quality is the very essence of their viability. All allotments are not equal as any Channel 69 UHF broadcaster competing with a VHF broadcaster (or a 250 watt directional day-timer competing with a 50 kW non-directional AM) will attest.

There is, of course, an existing broadcast-related coordination activity in the Part 74 auxiliary services. Local SBE coordinating committees have successfully managed the fair and equitable assignment of frequencies for STL, TVP, ICR and RPU purposes for many years. However, broadcasters use of Part 74 frequencies is very much akin to land mobile entities use of Part 90 frequencies; this activity by broadcasters is incidental to the main Part 73 broadcast purposes. There are few competitive aspects to these uses and virtually every user's eligibility for access is equal – very much different from their Part 73 broadcast allotments and their authorizations.

^{1/} NPRM at Paragraphs 6-8.

Equity and Confidentiality

The most prevalent model for a broadcaster seeking to improve its facilities begins with the commissioning of a consulting engineer ^{2/} to evaluate a range of options and to recommend a particular set of operating parameters (including site, height, power, antenna pattern and, if appropriate, frequency / channel). The consulting engineer conducts his / her studies based on knowledge of FCC requirements on accurate and current database information, and on years of professional broadcast engineering experience. While FCC hearings on engineering issues relative to granting a specific application are history, consulting engineers were recognized as expert radio engineers in these former FCC proceedings. While AFCCE does not claim to be the exclusive repository of radio engineering expertise in the private sector, these very same consultants are the same experts in propagation, coverage and allotment matters who are now competently dealing with DTV issues on behalf of their clients.

The services rendered to clients are performed on a highly confidential basis with the consultant holding the interests of his client foremost in his deliberations; the client receives the consultant's recommendations and, typically, requests that the consultant prepare an FCC application for the proposed facilities; all of this activity remains highly confidential until, of course, the application is filed with the Commission. Given the "first come, first served" policy regarding non-checklist DTV applications and the cumulative effect of interference on de minimis limits, this is a very important consideration for the broadcaster. Professional engineering consultants typically avoid relationships with other broadcasters in the same market-DMA where such competitive issues are at stake and, in fact, are ethically bound to advise clients of any potential conflict with other clients. It is not clear that this level of confidentiality and focus on a client's needs can be maintained in a committee structure.

^{2/} AFCCE recognizes that some broadcasters have the in-house expertise and resources to make such evaluations without engaging an independent consulting engineer.

AFCCE agrees with the comments of DLR, Fox, L&C that the proposals for a committee structure, such as the MSTV / NAB "National Coordination Committee", may not be in the best interests of broadcasters. Confidentiality, timing and performance in the best interests of the applicant are very much in question. The broad scope of functions suggested by MSTV / NAB and APTS / PBS cover virtually every area of responsibility of the Commission in processing applications short of actually issuing the instrument of authorization. This casts the committee in a Solomonic role where it will be attempting to ameliorate conflicts between (among) conflicting proposals and making engineering recommendations regarding siting, coverage, joint tower arrangements and the like; this goes well beyond the "certification / clearinghouse" functions alluded to in the comments of the proponents.

Timeliness

Under the present system, an applicant's DTV proposal (application) is processed on the basis of filing date with respect to other filings, i.e., first come-first served. If the coordination process is "voluntary", one would have to ask why an applicant would not file its proposal directly with the Commission first. This is particularly true in light of the Commission's statement "[W]e therefore are not proposing to establish a specific time limit for completing actions in response to requests or to require that such actions be completed in the order in which they were received."^{3/} This would be an unacceptable approach for a broadcaster who is making a proposal upon which its future viability rests. What happens to a relatively simple request which could be "coordinated" except for a conflict with an earlier-filed complex coordination proposal? Does it get "certified" prior to the resolution of the complex case? How are these conflicting proposals kept confidential? What happens if the simple application is instead filed directly with the FCC while the coordinating committee is considering the complex proposal for which no FCC application exists? Where do the equities and preferences lie?

^{3/} NPRM at Paragraph 24.

Committee Structure

Assuming, arguendo, that a National Coordination Committee were to be established following the Commission's model and / or that proposed by MSTV / NAB, the make-up of this committee will be very problematic. First, the actual coordination work will have to be performed by a staff – a staff that will have to be hired and trained to be "experts" in DTV allotment matters. Just who are these people? Or is it being suggested that the coordinating "committee" would be a group of qualified volunteers? AFCCE recognizes that the "Governing Council" could be composed of industry volunteers who would set policy, review procedures and provide liaison with the Commission. But the "nitty-gritty" day-to-day work of the National "Coordination" Committee could never be accomplished by a traditional volunteer committee structure; these workers would doubtless be full-time staff members. Who will train and certify this staff? Certainly not the volunteer committee. Even if this work could be handled by a "committee", who would be eligible to serve on it? Technical qualifications aside, engineering consultants, employees of stations or organizations representing only some broadcasters, and representatives of group broadcasters would seem to be ineligible because of the obvious potential for conflicts of interest (or, at least the appearance thereof). Assuming, further, that a "committee" could be established after fully addressing these structural issues, the operational structure of this "committee" is not defined. Would it vote on resolution of conflicting proposals? Would a consensus, super-majority or simple majority be required for "approval"?

Regional Committees, by definition, cannot work in the coordination mode. These would be volunteer groups composed of employees of broadcast stations who would be expected to evaluate and approve proposals made by their competitors. While informal regional user groups which voluntarily meet to discuss proposals for their members mutual benefit should be encouraged, there is no practical way for such groups to function as coordinators in an unbiased, timely fashion nor are there any practical procedures to assure their on-going technical competence to provide coordination services as envisioned in the

NPRM. There is also the question of regional boundaries. Since radio waves have no regard for arbitrary geographical boundaries, inter-regional issues will abound; these are issues that could only be addressed by the National Coordination Committee, thus diminishing the role and viability of a Regional Committee.

The Real Issue

Perhaps, the Commission and the industry need to step back and re-assess "the problem" and define the real issues. AFCCE believes that the issues can be defined and addressed in a more traditional approach.

AFCCE believes the industry only needs some basic data and tools, which the Commission can provide, in order to evaluate the technical aspects of any DTV or NTSC proposal. These are:

- an accurate database updated daily with all pertinent technical details available on-line;
- interference evaluation software.

With respect to the latter, the Commission can:

- provide software which runs under common operating platforms such as Windows '98, NT, or similar systems;
- certify the software available from providers such as ITS / TAS, V-Soft, EDX and others;
- certify proprietary software used by consultants as being compliant with OET-69.

It is commonly understood that the Commission's in-house software, which was originally intended to be used for allotment table purposes, may not be apropos or efficient for routine processing of applications. If this is the case, this clearly needs to be corrected and the evaluation software should be made available to the public. The certification of software will have to be performed, in any event, even if the coordination model is adopted.

There is enough experience now – particularly among consultants – to know that this software issue is not a major problem to solve. All that is needed is Commission certification of software in use. The Commission should be entitled to a cost recovery fee for these services.

With these tools, the industry, including consulting engineers and, if they so desire, stations and others, may evaluate proposals prior to submitting them to the Commission and have a high level of assurance that the Commission's evaluation will yield the same results. The Commission could require that applicants submit appropriate input-output data generated by the software to demonstrate that the proper input data was used and that any user "toggles" were properly selected. This is a basic communications engineering issue and, while admittedly complex compared to previous NTSC requirements, can be readily implemented.

The evaluation of applications and proposals as a precedent to a grant of a construction permit or other authorization is the responsibility and work of the Commission. It should remain there. If the Commission lacks the resources, financial or otherwise, it should adjust the application fees to cover the cost of remedying any such deficiencies ^{4/}. The industry is going to pay the fees anyway whether it be to a "coordinator" or the Commission ^{5/}.

^{4/} If the Commission is unwilling or unable to bolster its internal resources to permit traditional internal processing of applications, AFCCE supports the proposal of DLR that the Commission engage an outside contractor, under its direct control, to handle the mechanics of the application processing task. This contractor would employ Commission-provided software and follow established procedures as an extension of the Commission's staff.

^{5/} As noted earlier, the Commission must perform an economic analysis to set forth the costs to the users if the services are provided by the government or a "coordinator."

Technical Advisory Committee

Finally, there is the matter of a purely technical advisory committee. While the NPRM and the proponents comments suggest that this might be part of the role of a coordinator, AFCCE respectfully disagrees. A technical advisory committee should not be involved with the evaluation of particular station proposals nor should a "coordinator" be involved with establishing policy or rules. AFCCE repeats its request that the Commission establish a "TASO II" organization to deal with the many technical issues (which impact the processing and allotment matters) which have yet to be addressed. Some of these issues are addressed in the Everist comments; still others have been presented to the Commission informally by AFCCE and its members over the course of these proceedings. Now is the time to act on this request.

Summary

AFCCE opposes this coordination proposal.

For the reasons stated, AFCCE believes that establishing a quasi-regulatory body to perform services related to application processing that are clearly the purview and responsibility of the Commission would be ill advised. Further, it believes that the resulting body would not be a traditional industry volunteer committee but a new private sector bureaucracy which must be staffed; its "expert" status would be questionable at best. Timeliness, confidentiality and priority issues have not been adequately addressed in the NPRM or responses hereto.

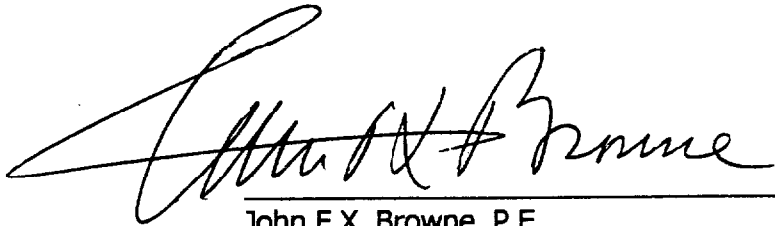
AFCCE believes the solution to these problems lies in the relatively simple tasks of establishing an accurate database and certifying interference evaluation software so that the industry can continue its traditional application preparation and submittal processes. The Commission should continue in its traditional processing role; if it lacks the resources to do so, it must raise the funds through higher application fees.

The Commission should establish a "blue ribbon" advisory committee ("TASO II") of competent communications engineers to assist in resolving the remaining issues that, if not promptly resolved, will slow the implementation of the DTV service, at best, and may result in numerous cases of harmful interference or lack of service, at worst.

Should the Commission establish a "voluntary" coordination process vested in some yet-to-be-born organization, AFCCE will insist that its consulting engineer members be afforded access to the same software and databases (or that its members' software be certified should a Commission approved version not be available) and that any application submitted to the Commission by its member organizations be treated in exactly the same manner as an application "certified" by a "coordinator", especially with respect to any processing priorities.

Respectfully submitted,

Association of Federal Communications
Consulting Engineers

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John F.X. Browne, P.E.
Chairman
Digital Television Committee

A handwritten signature in black ink, appearing to read "Cynthia M. Jacobson", written over a horizontal line.

Cynthia Jacobson, P.E.
President

CERTIFICATE OF SERVICE

I, KathleneAnne J. Reilly, certify that the following parties have been served with copies of the AFCCE Reply Comments in ET Docket 99-34 by First Class Mail this 28th day of April, 1999.

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